

CLAIMS

1. A transmission belt comprising:

a belt body made of a rubber composition; and

a cord comprised of poly-p-phenylene benzobisoxazole fiber,

5 said cord being embedded in said belt body, said belt body and said cord being formed into an integral whole by vulcanizing said rubber composition;

a surface of said cord being subjected to a primary treatment involving coating a mixture of an epoxy compound and latex and
10 heat treating, and a secondary treatment involving coating a resorcinol-formalin-latex adhesive and heat treating.

2. A transmission belt according to claim 1, wherein a main ingredient of said rubber composition is one of chloroprene rubber and hydrogenated nitrile rubber.

15 3. A transmission belt according to claim 2, wherein said epoxy compound is a polyepoxy compound having at least two epoxy rings in a molecule, and is soluble in water.

4. A transmission belt according to claim 3, wherein said epoxy compound is one of diglycerol polyglycidyl ether, polyglycerol
20 polyglycidyl ether, and sorbitol polyglycidyl ether.

5. A transmission belt according to claim 1, wherein said latex is one of an acrylonitrile butadiene rubber latex and chloroprene rubber latex.

25 6. A transmission belt according to claim 1, wherein said cord is produced by immersing poly-p-phenylene benzobisoxazole fibers

in a primary treatment solution of an aqueous solution of said epoxy compound, said latex, and a ring-opening catalyst of said epoxy compound, and after the immersion, heating at 230°C to 280°C for a predetermined time.

5 7. A transmission belt according to claim 6, wherein said ring-opening catalyst is an imidazole compound.

8. A transmission belt according to claim 7, wherein said ring-opening catalyst is 2-methylimidazole.

9. A transmission belt according to claim 6, wherein said
10 ring-opening catalyst is added in an amount substantially equal to 10 wt% with respect to the epoxy compound.

10. A transmission belt according to claim 1, wherein the solid content coat after said primary treatment is 3 to 8 wt% with respect to said cord before said primary treatment.

15 11. A method of treatment for bonding with poly-p-phenylene benzobisoxazole fiber, said method performing:

a primary treatment involving coating a mixture of an epoxy compound and a latex on a surface of said poly-p-phenylene benzobisoxazole fiber and heat treating the same; and

20 a secondary treatment involving coating a resorcinol-formalin-latex adhesive and heat treating the same.